## REMARKS

Claims 1-26 remain pending in this application. Claims 1-26 are rejected. Claims 3 and 10 are amended herein to clarify the invention, to express the invention in alternative wording, and to address matters of form unrelated to substantive patentability issues.

Applicant herein traverses and respectfully requests reconsideration of the rejection of the claims cited in the above-referenced Office Action.

The Office Action Summary page presently indicates that "None of the Certified copies of the priority documents have been received. Applicant respectfully requests that the Examiner acknowledge receipt of the priority documents filed in this application on October 20, 2003 (JP 2001-120335 and JP 2001-368002).

Claim 10 is rejected as indefinite under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter of the invention as a result of an informality stated in the Office Action. The claim is amended to remove use of the terminology "standard sequence." Therefore, reconsideration of the rejection of the claim and its allowance are earnestly requested.

Claims 1-26 are rejected as obvious over "Natural sequence code representations for compression and rapid searching of human-genome style

databases" (Rapid) in view of "Compression of Nucleotide Databases for Fast

Searching" (Fast) in further view of Math World (Math) under 35 U.S.C.

§103(a).  The applicant herein respectfully traverses this rejection. For a

rejection under 35 U.S.C. §103(a) to be sustained, the differences between the

features of the combined references and the present invention must be obvious

to one skilled in the art.

It is respectfully submitted that a *prima facie* case of obviousness  is not

established in rejection of claims 1-26.  "To establish a *prima facie* case of

obviousness, three basic criteria must be met.  First, there must be some

suggestion or motivation, either in the references themselves or in the

knowledge generally available to one of ordinary skill in the art, to modify the

reference or to combine the reference teachings.  Second, there must be a

reasonable expectation of success.  Finally, the prior art reference (or references

when combined) must teach or suggest all the claim limitations.  The teaching or

suggestion to make the claimed combination and the reasonable expectation of

success must both be found in the prior art, and not based on the applicant's

disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)."

MPEP §706.02(j) "Contents of a 35 U.S.C. §103 Rejection".

Applicant has reviewed the passages in Rapid indicated by the Examiner

as allegedly teaching "dividing one of text representing a sequence of said

biological compounds and numerical data obtained by converting said text data,

utilizing a conversion rule, into a plurality of m-bit partial data arranged in a plurality of columns in an arranged direction corresponding to a direction along which said biological compounds are placed and in a plurality of rows in a non-arranged direction which crosses said arranged direction," and can find no such teaching. Rather, the indicated passages of the Rapid reference merely disclose that "'amino acid residues are represented by the ASCII character codes for their one-letter IUPAC approved name. That is, alanine is stored as the ASCII code for A, for example, and apparently almost always as an 8 bit byte" (See page 284 column 1, paragraph 2). As such, the claimed recitation of dividing data using a conversion rule into a plurality of m-bit partial data arranged in a plurality of columns in an arranged direction and a plurality of rows in a non-arranged direction which crosses said arranged direction (for example as depicted in Fig. 7) is entirely lacking from the disclosure of Rapid.

Fast, which is alleged to disclose "computing a first set of parity information ." However, a reading of Fast reveals that the reference instead merely teaches "efficient implementation of Huffman coding, and the decoding process of Huffman coding,' (See Page 551, col. 1, section 4), and is therefore essentially directed to the compression of databases (See Page 549, col. 2, section 2), rather than computing of parity information (as depicted for example in Fig. 8).

Thus the combination of Rapid and Fast fail to teach or suggest the

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claimed feature of dividing text data representing a sequence of said biological

compounds or numerical data obtained by converting said text data by utilizing a

conversion rule into a plurality of m-bit partial data arranged in a plurality of

columns in an arranged direction corresponding to a direction along which said

biological compounds are placed and in a plurality of rows in a non-arranged

direction which crosses said arranged direction, where m is an integer greater than

or equal to 16. The combination further fails to teach or suggest another claimed

feature of computing a first set of parity information by applying a first operation

of a Galois field $GF(2^m)$ along the non-arranged direction to a set of partial data of

each column, and computing a second set of parity information by applying a

second operation of a Galois field $GF(2^m)$ along the arranged direction to a set of

partial data of each row.

The Math reference, cited for its general teaching relating to finite field

theory including a Galois field GF, provides nothing with respect to the claimed

features lacking in the Rapid and Fast references, discussed above.

As such, the proffered combination of references fails to teach as claimed

elements, as properly required for establishing a *prima facie* case of obviousness.

Thus, it is respectfully submitted that the rejected claims are not obvious in view

of the cited references. Reconsideration of the rejections of claims 1-26 and their

allowance are respectfully requested.

It is further noted that the above discussed features were present in the

originally filed claims. As such, the present amendments cannot necessitate

new grounds for rejection as the present rejections are respectfully submitted as

failing to have been established. Accordingly, it is respectfully submitted that a

next Office Action cannot be made final.

Applicant respectfully requests a one (1) month extension of time for

responding to the Office Action. Please charge the fee of $60 for the extension of

time to Deposit Account No. 10-1250.

The USPTO is hereby authorized to charge any fee(s) or fee(s)

deficiency or credit any excess payment to Deposit Account No. 10-1250.

In light of the foregoing, the application is now believed to be in proper

form for allowance of all claims and notice to that effect is earnestly solicited.

Respectfully submitted,
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